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AUTHOR	Rosmann, Michael R.; Howbray, R. Glenn
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AVAILABLE FROM	Michael R. Rosmann, Dept. of Psychology, Gilmer Hall, University of Virginia, Charlottesville, Virginia 22901
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ABSTRACT

This study examined the effects of different degrees of task structure on leadership between 18 married parents, 18 childless married spouses, and 18 unmarried men and women who comprised newly acquainted couples. Each couple completed three tasks which varied along the dimension of task structure and the order of task presentation. Analysis of the results indicated significant changes in leadership such that high task structure resulted in less dominance for males and lower speech durations for males and females. Medium task structure, which was confounded with high conflict arousal built into the task, resulted in the most relationship oriented type of leadership and the greatest duration of speech for both males and females. There were also significant differences among groups such that married men exhibited more task oriented leadership and dominance and less relationship oriented leadership than unmarried men. Married women who were parents exhibited less relationship oriented leadership and lower speech durations than women who did not have children. Men in all three groups showed more task oriented leadership than their female partners, but both sexes shared equally in relationship oriented leadership. (Author)

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Effects of Different Degrees of Task Structure on Leadership in Couples[1]

Michael R. Rosmann and R. Glenn Mowbray
University of Virginia

The effects of different degrees of task structure on leadership within small groups have been documented well (e.g., Fiedler, 1964; Hackman; 1968; Hackman & Vidmar, 1970; Morris, 1965; Shaw & Blum, 1965, 1966). Recently, research efforts (e.g., O'Neill & Alexander, 1971; Rosmann, 1975) have been undertaken to investigate the effects of this variable on leadership between married parents. O'Neill and Alexander showed that tasks with concrete demands resulted in greater paternal leadership while tasks with ambiguous demands resulted in equivalent paternal and maternal leadership. Rosmann's data indicated that high structure tasks produced greater instrumental leadership among fathers and lesser instrumental leadership among mothers. Low structure tasks, on the other hand, resulted in greater durations of speech for both spouses, more interpersonal dominance for both spouses, and more social-emotional leadership among mothers. Other research testing Parsons' and Bales' (1955) theory of family roles, while not examining the effects of task structure per se, gave evidence that fathers tended to lead on tasks which required problem solving and manipulative skills and mothers tended to lead on tasks which required nurturing skills and preservation of good interpersonal relations (Levinger, 1964; Slater, 1961; Zelditch, 1955). Taken together, the data from these studies suggest that high structure tasks generate instrumental leadership and this leadership is supplied chiefly by fathers, while low structure tasks generate social-emotional leadership and this leadership is supplied chiefly by mothers. However, it is not known if these effects extend to married couples without children and unmarried couples.

The purpose of this study is to determine the effects of varying degrees of task structure on leadership between married parents, childless married spouses, and unmarried men and women who comprise newly acquainted couples. Moreover, in the course of the study information can be gained about differences, if any, in leadership among the three groups of partners. Based on the research reported above pertaining to the effects of task structure on leadership in small groups and parental couples, it was predicted that low task structure would result in more social-emotional leadership and less instrumental leadership for both spouses in all three groups. It was further predicted that low task structure would generate more interpersonal dominance and hostility, less submission and friendli-

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ness, and greater durations of speech for both spouses in all groups. High task structure would have the opposite effects. Based on Parsons' and Bales' (1955) theory of family roles, it was hypothesized that males in all three groups would emerge as instrumental leaders and females in all three groups would emerge as social-emotional leaders. It was felt that married couples with children would be the most responsive and unacquainted couples would be the least responsive to these conditions.

Method

Subjects

The subjects (Ss) for this study were 18 previously unacquainted males and females (Group 1), 18 married childless couples (Group 2), and 18 pairs of parents (Group 3). The Ss volunteered for the study and were offered two dollars per person after participating. Overall, the males averaged 24.1 years of age and 15.5 years of schooling while the females averaged 22.8 years of age and 14.4 years of schooling. The age and amount of education of both males and females increased directly in relation to being married and having children. The composition of the groups was balanced in terms of race and religious preference.

Procedure

An experimenter showed each couple to a room with a one-way mirror on one side and gave each couple brief instructions about the experiment. The instructions consisted of telling the Ss that they would be asked to complete three tasks together, that the experimenter would collect the materials after 15 minutes or sooner if the couple finished the task before the 15 minute time limit, and that the experimenter would record the conversation. Each S was then given a copy of the first task and a pencil. Each task sheet instructed the couples how to solve the task together and that one S should write their joint solution of the task. After the Ss completed a task, the experimenter entered the room and gave the Ss their next task or a postexperimental questionnaire if the Ss had finished their third task. A male assistant served as experimenter for odd numbered couples and a female assistant served as experimenter for even numbered subject couples. Each couple performed three tasks, which varied in terms of structure, and the order of task presentation was balanced.

Stimulus Tasks

Based on the task classifications schemas of Fiedler (1964), Hackman (1965), and Shaw (1963), three stimulus tasks were devised to vary along the dimension of task structure, as defined by Fiedler and Chemers (1974). The low structure task

entailed discussing the topic of "What qualities make a person successful?". The medium structure task involved determining how to spend a $75.00 tax refund to purchase items which might be appropriate for both partners (e.g., encyclopedias, a night on the town, a pet). The high structure task consisted of using conversion tables to ascertain how much money in American dollars is needed to purchase items which have their values listed in Belgian francs, West German marks, or Italian lira. Previous research (i.e., Rosmann, 1975) had shown these tasks to vary in structure as expected and subject ratings of the tasks completed after the experiment was over verified these conditions. However, the subjects indicated by their ratings that the medium structure task was significantly ($\chi^2 = 13.92$, $p < .01$) more conflict arousing than the other two tasks. Previous research (i.e., Rosmann & Hanson, 1975) revealed that these tasks were equally appealing to males and females and subject ratings of the tasks confirmed this condition.

Dependent Measures

Three dependent measures were obtained. The first measure consisted of ratings of leadership style. Ten-second blocks of behavior were scored into one of three categories: task-oriented leadership (T), relationship-oriented leadership (R), and nonleadership behavior (O). The definitions of these categories were derived from Rice's (1973) modification of the Leader Behavior Description Questionnaire (Stogdill & Coons, 1957). For example, the act of one spouse prodding the other to work on a problem would be rated as a T response because prodding was reported by Rice to be highly related (i.e., .56) in factor analysis to task-oriented leadership. Only the partner who dominated the ten second interval was rated. Following procedures specified by Jensen (1959), percent effective agreement between two raters was calculated during a training period and during reliability probes and averaged 97%.

The second dependent measure consisted of ratings of interpersonal communication style according to Rosmann and Alexander's (1974) modification of the Leary Interpersonal Behavior System (Leary, 1957). Ten-second blocks of interpersonal communication were scored into one of eight categories: dominant-friendly (Df), friendly-dominant (Fd), friendly-submissive (Fs), submissive-friendly (Sf), submissive-hostile (Sh), hostile-submissive (Hs), hostile-dominant (Hd), and dominant-hostile (Dh). Only the partner who dominated the ten second interval was rated. Total scores of each of the four major styles, namely, dominance, submission, friendliness, and hostility, were obtained by summing all the ratings in which one of the communication styles was a component. For example, interpersonal dominance was composed of the sum of Df, Fd, Hd, and Dh ratings. The ratings of interpersonal communication style were made simultaneously with the ratings of leadership style, but by another rater. The percent effective agreement between

two judges during a training period and reliability probes was 91%.

The third dependent measure was the number of seconds of speech per minute, as recorded with cumulative stopwatches. This measure was selected because it afforded different information about leadership style than the rating systems yielded. Reliability probes were conducted on 30 of the couples and yielded near perfect agreements on the seconds duration of speech.

Results

Table 1 illustrates the data of the three dependent measures for males and females of the three groups of couples. The data for males and females were compared separately with t tests for all groups. As is shown, there were no differences between males and females in the unacquainted group on any of the dependent measures, while males in groups 2 and 3 exhibited significantly more instrumental leadership (i.e., T ratings per minute) than females. The significant differences are in accordance with the hypothesis that males would show more instrumental leadership than females. Females, however, did not exhibit more social emotional leadership (i.e., R ratings per minute) than males. Males who were parents showed more interpersonal dominance (i.e., D ratings per minute) and friendliness (i.e., F ratings per minute) than their female spouses while the mothers exhibited more nonleadership comments (i.e., O ratings per minute) than the fathers. The only other significant difference was that females in group 2 showed more hostility (i.e., H ratings per minute) than their husbands. Another important feature of the results is that there is a relative paucity of R and O ratings in comparison to T ratings and many fewer S (submission ratings per minute) and H ratings than D and F ratings. This may have resulted from the demands of the experiment that the couples produce solutions to all three tasks, a situation which necessitated more task-oriented leadership and dominant and friendly behavior. The tendency for persons to inhibit socially undesirable behaviors (e.g., hostility) in social situations may have also played a part.

The hypotheses that there would be differences on the dependent variables associated with groups and with the varying degrees of task structure were tested by using analyses of covariance to partial out effects due to differences in age and amount of education among the subject groups. The results of the F tests for differences among groups are presented in Table 2 and the F tests for task structure effects are shown in Table 3. Since there were no effects due to order or interaction effects of either main variable with order, these F tests are not reported. The only significant interaction of groups with structure was on submission for females, such that females in group 1 exhibited the greatest amount of sub-

mission on high structure tasks and females in group 3 exhibited the least submission on low structure tasks.

As is shown in Table 2, there were significant differences in instrumental leadership among groups of males and social emotional leadership among groups of females. The effects were in the predicted direction for males, that is, increasing in relation to marriage and parenthood. However, females in the unacquainted group exhibited the most social emotional leadership while mothers showed the least social emotional leadership. This unexpected finding ties in with a similar but nonsignificant trend for males and suggests that persons in newly established relationships engage in more social emotional leadership than spouses who have had longer relationships. Consistent with this finding are the significant increases in nonleadership comments for both males and females in parent groups and the higher dominance scores for both spouses in groups 2 and 3. Moreover, women in the unacquainted group demonstrated the most submission of any group and both men and women in this group or group 2 spoke the longest. Taken together, the data suggest that marriage and having children engender role consolidations which are characterized by more task-oriented leadership in males, less social emotional leadership in females, more interpersonal dominance and exhibition of nonleadership, and more efficient use of speech (i.e., lower durations of speech).

As can be seen in Figure 1, the effects due to variations in the degree of task structure lend only partial support for the predictions and this support is mitigated by unexpected effects associated with the medium structure task. Generally, the results for males and females were parallel. As predicted, the greatest amounts of social-emotional leadership, interpersonal dominance, hostility, and speech and the least submission were exhibited on low or medium structure tasks while the high-structure task had opposite effects on these variables. Contrary to predictions, however, the highest amounts of task oriented leadership and friendliness for males were exhibited in the low-structure condition. Many of these shifts were statistically significant, as Table 3 shows. Since there was only one significnat interaction effect of groups with structure, it can be assumed that the effects reported here were the same, or nearly so, for all three groups of subjects. The fact that the medium structure task had such pronounced and unexpected effects ties in with the finding that this task was rated as highest in conflict arousal properties.

Discussion

Overall, the results confirm that task structure is an important variable influencing the amount and style of leadership between married parents, married childless couples, and unacquainted couples. However, the results also indicate that

conflict arousal characteristics of the stimulus situation play an important role in the amount and style of interaction between all three types of couples. Thus, it appears that O'Neill and Alexander's (1971) and Rosmann's (1975) conclusions that task structure and conflict arousal significantly influence leadership between married parents can be extended to spouses without children and even to newly formed couples. Further studies in which these two variables are not confounded need to be conducted in order to clarify the effects of these variables separately.

While the results suggest that different degrees of task structure and conflict arousal have qualitatively similar effects on parents, childless married couples, and unacquainted couples, there were clear differences among the three groups in terms of the quantity of leadership behaviors. The most likely interpretation of the results is that persons in relatively new relationships engage in more social emotional leadership than persons whose relationships have been cemented by marriage. Moreover, it appears that having children generates more tolerance for nonleadership comments, more interpersonal dominance, more efficient use of speech to solve problems for both spouses, and more task oriented leadership by males. In short, persons in new relationships exhibit more social emotional leadership in order to develop and define the relationships while married couples and parents dispense with some of the social emotional leadership in favor of more task oriented leadership, but also more interpersonal dominance as the spouses feel freer to jockey for position within the relationships.

Examination of sex differences in leadership lends only partial support for Parsons and Bales' (1955) theory of sex roles for males and females. The facts that males and females shared in social emotional leadership while males were more task oriented and domineering argues for the proposition that women no longer cling exclusively to the social emotional leadership role as they did in the days when Parsons and Bales' theory was formulated. Perhaps men now share in this role with women, a result which might relate to the changing roles for men and women in recent years.

References

Fiedler, F. E. A contingency model of leadership effectiveness. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 1). New York: Academic Press, 1964. Pp. 149-190.

Fiedler, F. E. & Chemers, M. M. Leadership and effective management. Glenview, Ill.: Scott-Foresman, 1974.

Hackman, J. R. Test, questionnaires and tasks of the group effectiveness research laboratory: 1951-1964. Urbana, Ill.: University of Illinois Technical Report No. 24, 1965.

Hackman, J. R. & Vidmar, N. Effects of size and task type on group performance and member reactions. Sociometry, 1970, 33, 37-54.

Jensen, A. R. The reliability of projective techniques: Methodology. Acta Psychologica, 1959, 16, 3-67.

Leary, T. The interpersonal diagnosis of personality. New York: Ronald, 1957.

Levinger, G. Task and social behavior in marriage. Sociometry, 1964, 27, 433-448.

Morris, C. G. Effects of task characteristics on group process. Urbana, Ill.: University of Illinois Technical Report No. 2, 1965.

O'Neill, M. S. & Alexander, J. F. Family interaction patterns as a function of task characteristics. Journal of Applied Social Psychology, 1971, 1, 163-172.

Parsons, T. & Bales, R. F. Family: Socialization and interaction process. Glencoe, Ill.: Free Press, 1955.

Rice, R. W. Personality and situational determinants of leader behavior. Unpublished masters thesis, University of Utah, Salt Lake City, Utah, 1973.

Rosmann, M. R. The influence of sexist expectancy set and task structure on family leadership patterns. Paper presented at the meeting of the Southeastern Psychological Association, Atlanta, Georgia, March, 1975.

Rosmann, M. R. & Alexander, J. F. A direct test of the system model of family interaction. Unpublished manuscript, University of Utah, Salt Lake City, Utah, 1974.

Shaw, M. E. Scaling group tasks: A method for dimensional analysis. Gainesville, Florida: University of Florida Technical Report No. 1, 1963.

Shaw, M. E. & Blum, J. M. Group performance as a function of task difficulty and the group's awareness of member satisfaction. Journal of Applied Psychology, 1965, 49, 151-154.

Shaw, M. E. & Blum, J. M. Effects of leadership styles upon group performance as a function of task structure. Journal of Personality and Social Psychology, 1966, 3, 238-242.

Slater, P. E. Parental role differentiation. The American Journal of Sociology, 1961, 67, 296-311.

Stogdill, R. M. & Coons, A. E. Leader behavior: Its description and measurments. Columbus, Ohio: Ohio State University Monograph No. 88, 1957.

Zelditch, M. Jr. Role differentiation in the nuclear family. In T. Parsons and R. F. Bales (Eds.), Family: Socialization and interaction process. Glencoe, Ill.: Free Press, 1955. Pp. 307-351.

Table 1

t Comparisons of Results for Males and Females for each Group

Variable	Group 1 Mean	Group 1 S.D.	Group 1 t	Group 2 Mean	Group 2 S.D.	Group 2 t	Group 3 Mean	Group 3 S.D.	Group 3 t
T per Minute	1.26[a] 1.17[b]	.67 .61	.72	1.44 1.15	.74 .63	2.16[c]	1.61 1.17	.68 .67	3.39[d]
R per Minute	.36 .43	.49 .45	.68	.30 .42	.37 .43	1.50	.21 .18	.21 .21	.74
O per Minute	.02 .07	.10 .24	1.30	.08 .07	.20 .15	.37	.09 .18	.14 .32	2.02[c]
D per Minute	1.25 1.12	.69 .72	.97	1.61 1.46	.69 .74	1.07	1.60 1.23	.72 .77	2.54[d]
F per Minute	1.46 1.38	.65 .80	.58	1.72 1.51	.66 .71	1.55	1.66 1.35	.81 .79	2.00[c]
S per Minute	.37 .53	.51 .53	1.55	.19 .19	.47 .22	.05	.37 .35	.43 .34	.30
H per Minute	.08 .18	.20 .33	1.79	.02 .12	.07 .28	2.49[d]	.19 .23	.38 .35	.58
Seconds Speech per Min.	16.86 15.40	6.92 5.85	1.18	16.62 16.74	6.62 8.16	.09	13.6 12.4	5.96 4.99	1.20

[a] Top figures are data for males.
[b] Lower figures are data for females.
[c] Significant at $p < .05$
[d] Significant at $p < .01$

Table 2

Results of F tests for Differences among Groups

Variable	Males	Females
T per Minute	3.206[a]	.019
R per Minute	2.517	6.277[b]
O per Minute	3.073[a]	3.632[a]
D per Minute	4.433[a]	3.251[a]
F per Minute	1.807	.657
S per Minute	2.561	11.478[b]
H per Minute	6.216[b]	1.691
Seconds Speech per Minute	4.900[b]	9.045[b]

[a] Significant at $p < .05$
[b] Significant at $p < .01$

Table 3

Results of F tests for Differences due to Varying Degrees of Task Structure

Variable	Males	Females
T per Minute	1.490	.760
R per Minute	9.260[b]	9.316[b]
O per Minute	3.200[a]	3.215[a]
D per Minute	3.756[a]	3.694[a]
F per Minute	1.765	1.292
S per Minute	1.305	2.698
H per Minute	3.284[a]	1.379
Seconds Speech per Minute	14.460[b]	12.956[b]

[a] Significant at $p < .05$
[b] Significant at $p < .01$

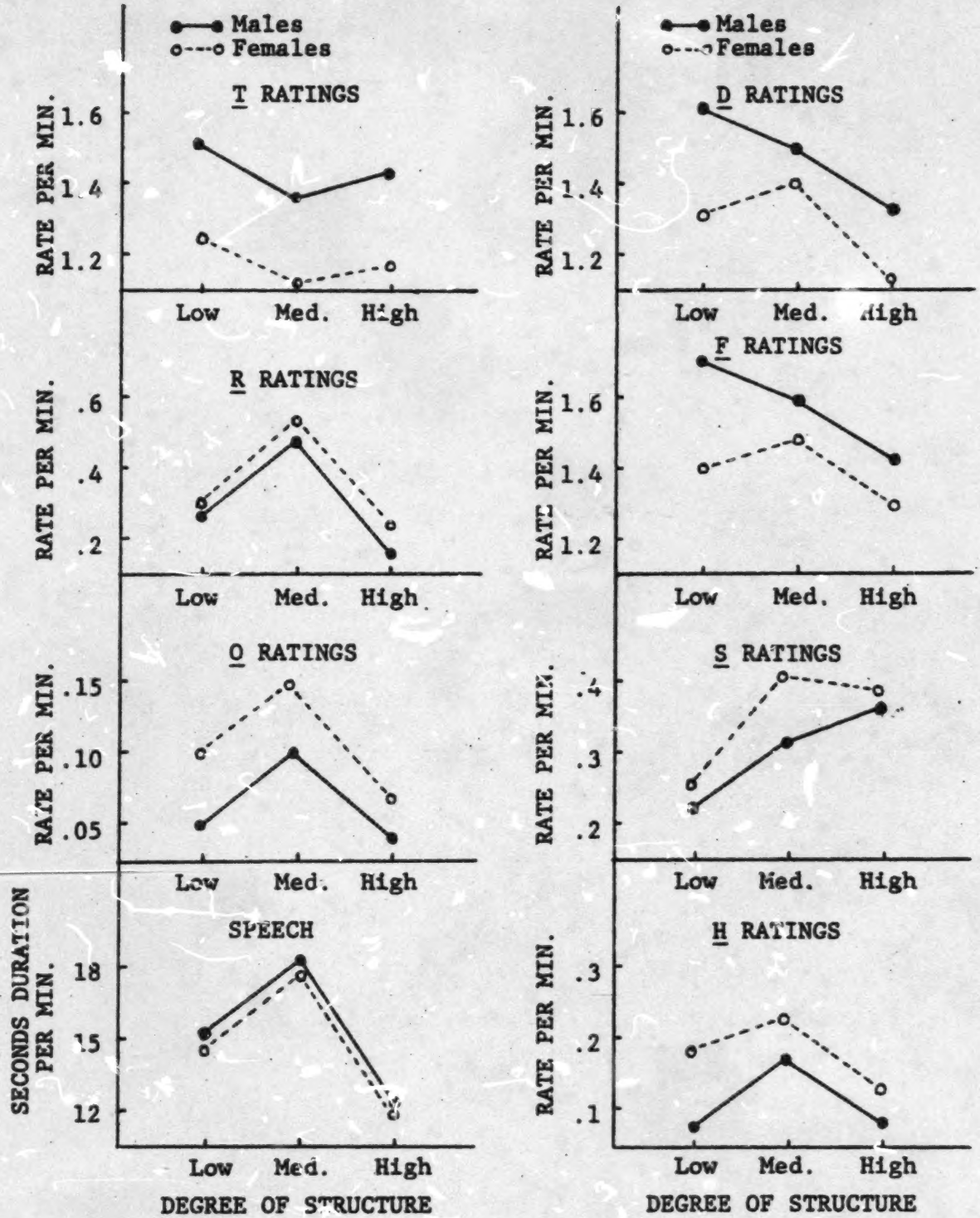

Fig. 1. Results of dependent measures for all subjects combined on tasks varying in degree of structure.